

Exhibit 1t

# United States Patent [19]

Bronstein

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[54] FOLDING BOOT-DRYING RACK

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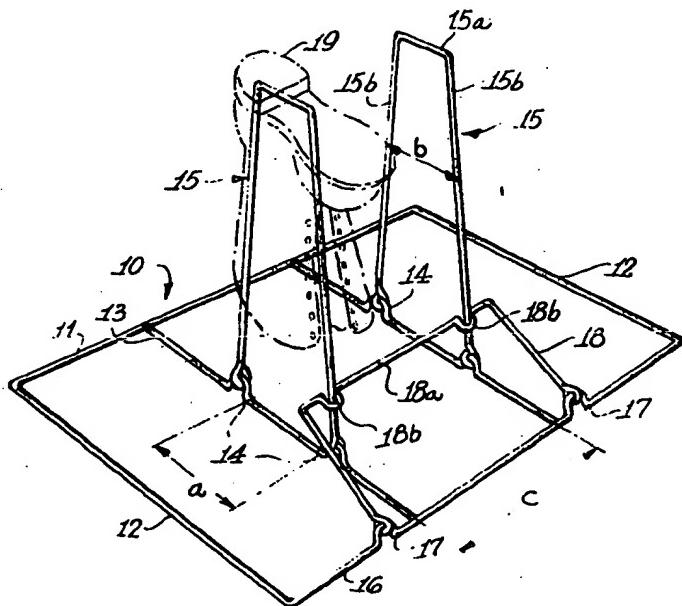
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[57] ABSTRACT

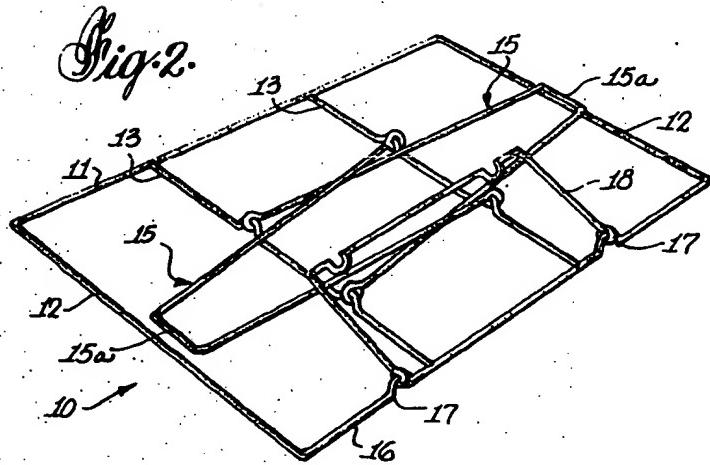
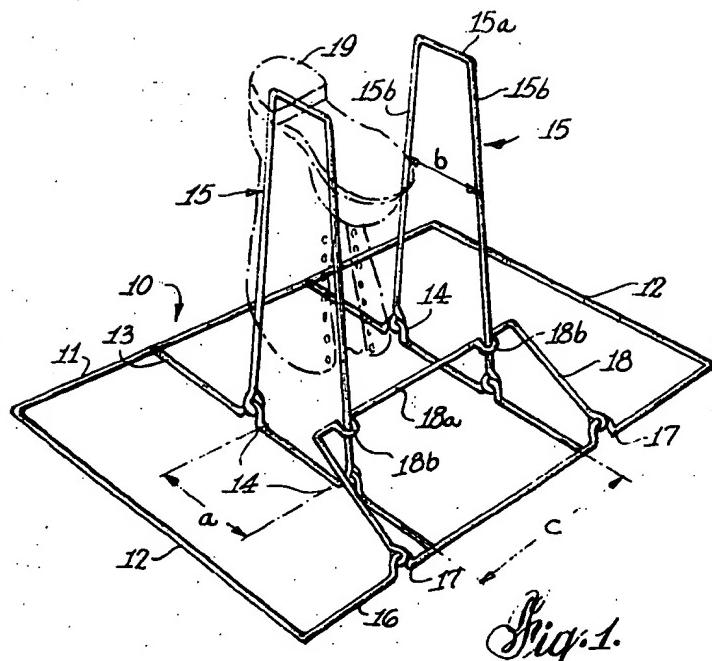
A folding boot-drying rack has a frame, open to permit the passage of air therethrough. Pivotably attached to the frame are boot supporting members, which when not in use are folded against the frame. A second member is pivotably attached to the frame and supports the boot supporting members in an upright, boot-supporting position.

3 Claims, 2 Drawing Figures



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## FOLDING BOOT-DRYING RACK

This invention relates to boot racks in general, and more particularly to a folding boot rack especially useful when drying any type of footwear.

The trend in modern footwear for use in inclement weather has been towards the tall boot. This is especially true insofar as women's fashions are concerned. In climates where heavy precipitation is encountered, it is inevitable that moisture will accumulate within the boots. During the winter season, children, workmen and anyone outdoors will experience the discomfort of wet boots. The drying of the insides of these boots presents a problem in that, unlike toe rubbers, boots cannot be easily propped-up against a radiator or stood on end over an air duct so that warm air will dry them out.

The present invention provides a simple folding bootrack which is especially suited to the drying of tall boots. It may, of course, be used in the drying of any style of footwear so long as the footwear will fit the supports provided. The invention includes a frame, preferably of wire, at least one boot support member hinged to the frame, adapted to support a boot or other footwear and pivotable through approximately 180° between positions substantially adjacent the frame and at least one support member hinged to the frame and adapted to support the boot support member in a position substantially perpendicular to the frame.

When the boot support member is in its supported position, a boot may be placed thereon and the entire rack placed on a radiator or other source of heat so that warm air is wafted into the boot to dry it.

The boot rack of this invention provides many advantages over those currently available. Since all components are formed of wire, construction is extremely simple and the design lends itself to assembly line techniques. By being foldable, the rack may be easily stored, in any attitude from horizontal to vertical. The folding mechanism is extremely simple, well within the capabilities of even very young children. Lastly, if the boot support members are properly designed, the rack could be used in any attitude from horizontal to vertical with little possibility of the boots falling off. Thus, the rack could be placed on a radiator in a horizontal position or in front of a radiator or open fire in a vertical position to dry the boots thereon.

The invention will now be described in more detail and with reference to the drawings, wherein:

FIG. 1 shows the folding boot-drying rack of the invention in its basic supporting position.

FIG. 2 shows the folding boot-drying rack of the invention in its folded position.

In a preferred embodiment of the folding boot-drying rack of this invention a frame 10 is constructed from lengths of reasonably heavy wire, for example, 3/16 to 1/4 inch in diameter. Frame members 11, 12 and 16 are formed into a substantially rectangular frame with cross-bracing members 13 provided to add strength and to support members 15. The frame members may be attached as suggested by any known technique, such as welding.

Cross-bracing members 13 are formed with generally U-shaped lugs 14 which, when the frame is assembled, project substantially perpendicular to the plane of the frame. In each cross-brace 13, the lugs 14 are formed in

the same location. While two lugs 14 are shown for each cross-brace 13, it would be a simple matter to provide more lugs to, in turn, accommodate more boot support members than are shown.

5 In a similar manner, frame member 16 is provided with lugs 17, each lug being positioned between a frame member 12 and a cross-brace 13. Usually each lug 17 will be positioned closer to its associated cross-brace 13 than to its associated frame member 12.

10 The boot-supporting portions of the rack are formed from wire members 15. Each member 15 is shaped with one end 15a parallel to cross-brace 13 and shorter in length than the inside width "a" between lugs 14. Thus, the sides 15b are not parallel to each other, thereby giving member 15 the general shape of a trapezium. In order to permit proper inward folding of the boot-rack, as shown in FIG. 2, the outside width "b" across member 15, which is taken at a distance from cross-brace 13 towards end 15a equal to the separation "c" of cross-braces 13, must be less than inside width "a." The members 15 could also be folded outwardly, in which case the shape of each member becomes immaterial except insofar as its ability to support a boot is concerned.

15 The ends of sides 15b of member 15 adjacent cross-brace 13 are each aligned with a lug 14 and the wire of each side 15b at this point is bent around its associated lug 14 to form a hinged joint. Thus with each side 15b attached to a lug 14 on a cross-brace 13, the member is free to rotate from a position adjacent frame 10 through substantially 180° to a second position adjacent frame 10. With the relationship between widths "a" and "b" as specified above, each member 15, when

20 rotated towards the other member 15 will lie substantially flat against frame 10. It is obvious, of course, that only one member 15 will actually lie flat against frame 10. The second member 15 will be supported more by the first member 15 than by the frame itself.

25 A third wire member 18 is provided to act as a support for members 15 when the latter are used to carry boots. Member 18 is substantially rectangular in shape, each of its end pieces terminating in a hinge at a lug 17 to permit rotation similar to that of members 15. The

30 member 18 has a side 18a parallel to frame member 16, the side 18a being provided with formed indentations 18b substantially in line with cross-braces 13. The member 18 is rotated away from members 15, which are then each rotated to a position substantially perpendicular to frame 10. In this position, each member 15 is ready to receive a boot 19 in an inverted attitude.

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Member 18 has a side 18a parallel to frame member 16, the side 18a being provided with formed indentations 18b substantially in line with cross-braces 13. The member 18 is rotated away from members 15, which are then each rotated to a position substantially perpendicular to frame 10. In this position, each member 15 is ready to receive a boot 19 in an inverted attitude.

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45 In the folded condition, as shown in FIG. 2, member 18 will lie on the uppermost of members 15. When the rack is to be used, member 18 is first rotated away from members 15, which are then each rotated to a position substantially perpendicular to frame 10. In this position the members 15 are essentially parallel to each other. Member 18 is then rotated back towards members 15 until indentations 18b come in contact with sides 15b. This is the locked position, as members 15 are prevented from further rotation by the interaction of sides 15b and indentations 18b.

50 The rack may be folded for storage by a reverse procedure to that outlined above.

In use, the boot-drying frame may be placed on a radiator or any heat emitting device, so that hot air is wafted into the boots 19, thereby drying them. If the slope of sides 15b of each member 15 is not too great, the frame 10, could be hung vertically in front of a radiator, or an open fire, for example, without danger of the boots falling off.

While the invention has been described for boots, there is no restriction to the nature of footwear that may be dried thereon. The only criterion is that the footwear should be mountable on member 15. As mentioned earlier the boot-drying rack herein described is a preferred embodiment of the invention. There would be no difficulty in providing multiple sets of members 15 and 18 or in providing more than one member 15 on each cross-brace 18, with each member 15 interconnected together so that a minimum number of members 18 is required.

While the folding boot-drying rack of this invention has been described as being constructed from wire, there would be no problem in moulding the component parts in an appropriate plastic material or in using any other suitable material.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

5 1. A rack for footwear, said rack comprising a rectangular frame formed of wire and having at least two spaced apart cross-bracing members extending between two opposed sides thereof, a plurality of first members formed of wire, at least one of said first members being pivotably attached to each of said cross-bracing members, and at least one second support member formed of wire substantially in the shape of a rectangle being pivotably attached to and having as a side thereof a portion of one of said opposed sides, said first and second members being rotatable between collapsed positions substantially adjacent said frame and erected positions wherein the second member supports said first members in footwear supporting positions.

10 2. A rack according to claim 1 wherein each of said cross-bracing members and said one of said opposed sides includes least two inverted U-shaped lugs providing journal portions for corresponding hinge portions on said first and second members

15 3. A rack according to claim 1 wherein said second member includes a plurality of indentations in a side opposite said one of said opposed sides, each indentation locking one of said first members against rotation when said first members are in their erected positions.

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